

# DOCUMENT RESUME

ED 257 298

EC 172 726

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**TITLE** Opening Doors: Employing the Disabled.  
**INSTITUTION** Arizona State Dept. of Education, Phoenix. Div. of Career and Vocational Education.; Arizona Univ., Tucson. Coll. of Education.  
**SPONS AGENCY** Department of Education, Washington, DC.  
**PUB DATE** [85]  
**NOTE** 59p.; Paper based on handbook was presented at the Annual Convention of the Council for Exceptional Children (63rd, Anaheim, CA, April 15-19, 1985). For a related document, see EC 172 725.  
**PUB TYPE** Guides - Non-Classroom Use (055)  
**EDRS PRICE** MF01/PC03 Plus Postage.  
**DESCRIPTORS** \*Accessibility (for Disabled); Attitude Change; \*Disabilities; \*Employer Attitudes; \*Employment; Epilepsy; Hearing Impairments; Interaction; Learning Disabilities; Mental Retardation; Physical Disabilities; Physical Mobility; Visual Impairments

## ABSTRACT

The handbook is intended to help employers understand barriers to employment of disabled people. Barriers are examined, including attitudinal, physical (architectural, transportation, site, and equipment), policy and practice barriers (interviewing and recruiting), and communication barriers. Suggestions and guidelines for dealing with the barriers are offered. Six types of disabilities are examined and guidelines offered for interaction: learning disabilities, hearing impairments, epilepsy, mobility impairments, mental retardation, and visual impairments. Approaches to preparing coworkers are noted along with a series of mini-activities allowing people to express their feelings about disabilities through role playing. A bibliography and glossary are appended. (CL)

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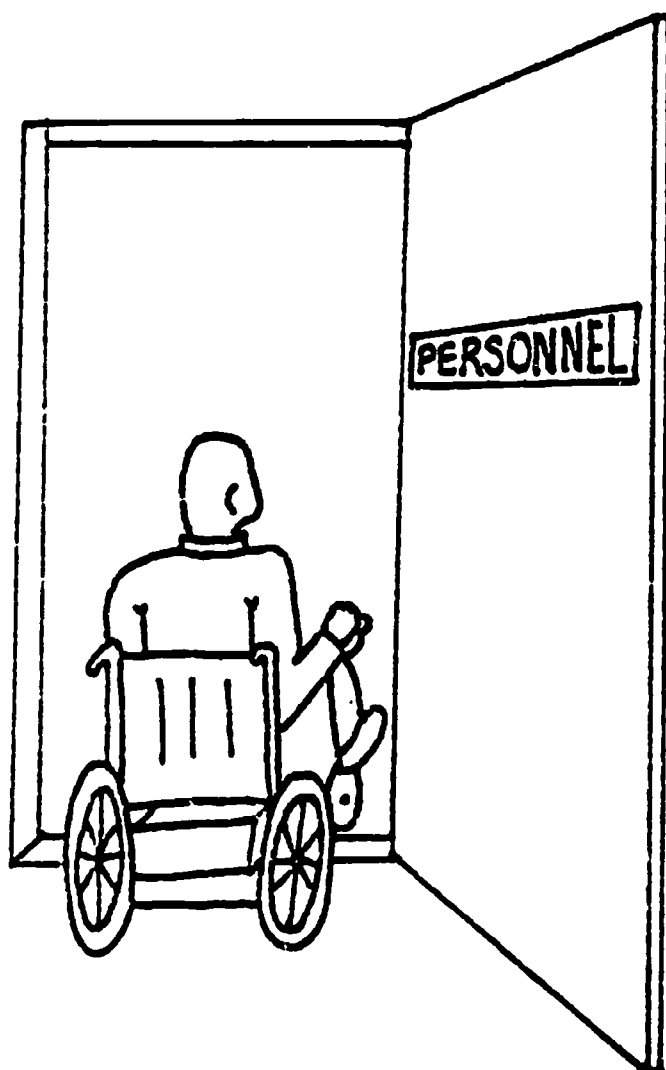
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# OPENING DOORS

## Employing the Disabled



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# Foreword

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No written material exists that will ever be able to define or describe all the nuances of disability. This handbook is an attempt at opening doors for the disabled employee by helping the employer acquire new levels of sensitivity and competency by identifying attitudinal barriers, learning about disabilities, and providing awareness training activities.

Appreciation is extended to Karen Zopf for the typing and layout of this handbook.

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# Introduction

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Less than 43% of the disabled population actually work in competitive employment. Quite frequently, the disabled who are employed are also victims of underemployment; i.e., they are in the workforce, but in positions that do not utilize their capabilities and training to full potential. The problems of unemployment and underemployment add up to considerable cost to this country through the underutilization of this human resource (Jamero, 1979).

The high rates of unemployment and underemployment may be partially due to misconceptions and apprehensions on the part of employers in reference to disabilities. Employers' knowledge of disabilities may be limited, or detailed only in a specific type of disability with which they have had experience. General expectations of the abilities of disabled employees can therefore be distorted, either too high or too low, and these expectations can be a threat to the realization of job potential by the employee.

It is important for the employer to not classify jobs according to those which are appropriate for persons with disabilities and those which are not. Somewhere, there is a disabled person who can efficiently perform any particular job. The task is to find that person. Most disabled persons are aware of their limitations and "will not apply for jobs for which they are unqualified" (Wysocki & Wysocki, 1979, p. 59).

The ability of a particular individual to do a particular job depends on the specific qualifications and abilities of the individual and the specific requirements of the job. One does not have to "walk" in order to work at a desk all day, "see" to be a computer programmer, "hear" to operate equipment, or "be bright" to do simple tasks.



The disabled individual may be just as well prepared for work as is a non-disabled counterpart, or less so, but his/her chance of getting a job ultimately depends on acceptance by an employer (Office of Personnel Management, 1979). The following section discusses barriers that may interfere with employer/employee acceptance of the disabled worker.

# Barriers

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Barriers are obstacles that come between the disabled person and what that person wants or needs to accomplish. Four categories of barriers are: attitudinal barriers, physical barriers, policies and practices, and communication barriers.

## Attitudinal Barriers

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Attitudinal barriers usually result from a lack of experience and interaction with disabled individuals. This lack of familiarity has nourished negative attitudes concerning employment of the disabled.

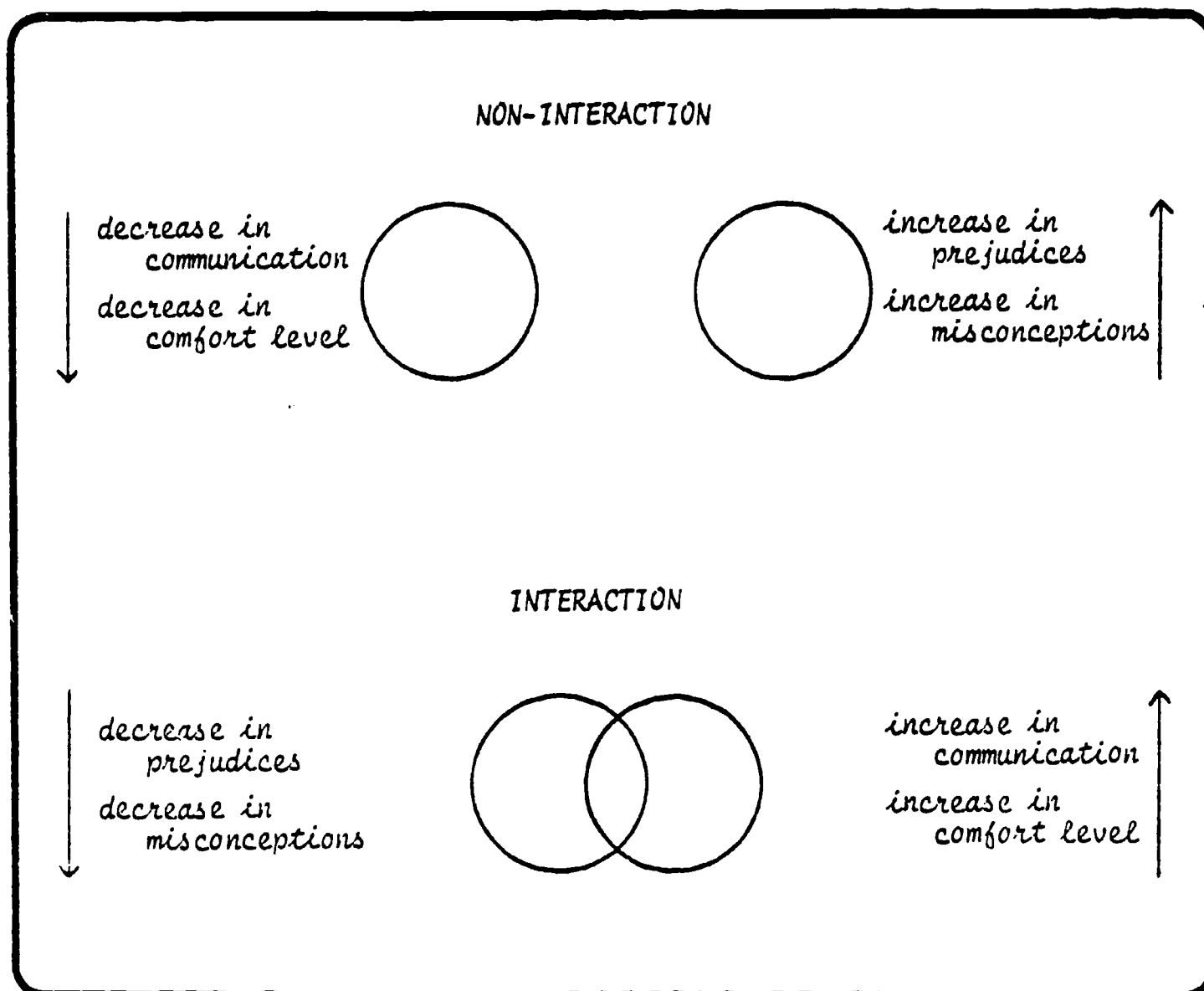
Practically everyone, at one time or another, is apprehensive and uncomfortable in the presence of a disabled person. The non-disabled person may have misconceptions about disability or may experience discomfort because he or she doesn't know what to say or do, or where to look. He/she may not know what to do if an unpleasant situation arises. Consequently, the tendency is to avoid people with disabilities.

The best way to learn about disabilities is to spend time with people who have them. "Contact with disabled persons in a social or employment setting in which the person's abilities and 'normality' are emphasized rather than his disability or 'differentness' is more likely to bring about positive change" (Wysocki & Wysocki, 1979, p. 64).

Employers' attitudes towards disabilities play an important role in determining the ability of the disabled person to get the job, to keep the job, and

to get promoted within the company.

Every person has limitations and is handicapped in one way or another. However, in our society some limitations are more easily accepted than others. This attitude is subject to stereotypical thinking, and concentrates on disability rather than on ability. However, it can often be changed by actual experiences employing disabled individuals. As we learn about each other in a work situation, our prejudices and misconceptions can dissolve. The more interaction that takes place, the more comfortable we will feel with each other, and the groundwork is laid for an increase in communication. This is demonstrated in the following table.



Negative attitudes that interfere with the recognition of the abilities of qualified disabled individuals are:

Apathy: Many people are unaware of the problems that confront disabled employees and applicants. Therefore, they do not care about these problems and do not work to solve them.

Assumptions of inferiority: Many disabled people are treated as if they were children, or they are patronized. It is not unusual for the disabled to be spoken to in the third person, even though he or she is present. "What would she like to eat?" is often asked to a luncheon partner of the disabled person rather than to the person herself.

Backlash: Some managers and supervisors resent what they feel is pressure to employ and promote disabled individuals and members of other special populations.

Fear: Many people are uncomfortable around individuals with certain disabilities. They are afraid because the other person is different, and they are embarrassed by their response to this difference.

Fear of change: Employers may fear the presence of a disabled person will disrupt routine and lessen productivity.

Focus on disability: When a disabled individual is considered for a job or a promotion, it is easy to overemphasize what the individual will be unable to do.

Lowered expectations: Few people have "realistic" expectations of disabled persons. Many people tend to underestimate skill/ability level.

Paternalism: People with the best of intentions may have the mistaken idea that disabled individuals cannot take care of themselves and that they need special supervision on the job.

Spread of effect: The total person is assumed to be impaired by the dis-

ability. A person who is blind may be considered hard of hearing, a person who is mobility impaired may be considered unable to write, a person who has a learning disability may be considered "slow." These are examples of the assumption that, when one ability is lost, other abilities are also affected.

Stereotyping: Preconceived notions interfere with consideration of individual characteristics; e.g., deaf people are good printers, therefore, all deaf people should be printers (Hicks, undated; Office of Personnel Management, 1979).

## Myths

There are common myths surrounding disability and these myths emphasize the "differentness" (Wysocki & Wysocki, 1979):

1. *Disabled people are inspirational, courageous, and brave for being able to overcome their handicaps.* The perpetuation of this myth is responsible for patronizing attitudes that make disabled people cringe. Disabled people are simply carrying on normal activities of daily living when they drive to work, go grocery shopping, and pay their bills.

2. *Disabled people are asexual.* Unfortunately, many people do not see the disabled as "marrying material" and disallow their sexuality. The fact is that many disabled persons date, marry, and have family responsibilities.

3. *Disabled people need to be protected from reality or from failing.* Disabled people have a right to participate in the full range of human experiences -- including success and failure. If a disabled employee has poor work performance, discuss it! Don't let it go by. You have an obligation to deal with disabled employees in the same way you deal with non-disabled employees.

4. *Disabled people are sick and/or unhealthy.* This myth prevents a lot of people from being hired in the first place. Employers believe that the disabled employee will have a high absentee rate. That is not true."

Many employers fear safety records will be jeopardized and that job performance of the disabled will be slower. However, these fears are unfounded.

In 1981 DuPont conducted a survey of 2,745 disabled workers and found:

- \*96% of disabled workers rated average or above average in job safety compared to 92% for non-disabled workers.

- \*92% rated average or better in job performance compared to 91% for non-disabled workers.

- \*85% rated average or better in job attendance compared to 91% for non-disabled workers (E. I. duPont de Nemours, 1982, p. 6).

## Physical Barriers

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Physical barriers include architectural, transportation, site, and equipment conditions that prevent or make difficult access to disabled employees. Architectural barriers include heavy doors, narrow doorways, steps, and stairs. Site barriers include steep inclines, elevator controls that are too high, and uneven surfaces (Hicks, undated). Physical and site barriers can be removed through modifications and accommodations of the work environment.

In order to provide reasonable accommodation to the disabled employee, find out the individual's limitations as they relate to job requirements. The best source for this information is the employee. Do not assume that expensive modifications are necessary. Each person has his or her own way of performing job tasks. It is better to ask the person how he or she performs the task before specific modifications take place.

Modifications should enable the disabled employee to work next to and use the same facilities as other workers (Wysocki & Wysocki, 1979).

## SUGGESTED MODIFICATIONS AND ACCOMMODATIONS

Amplifiers built into telephones

Flashing lights, instead of bells, on the telephone

Teletypewriter devices attached to telephones that allow the person to receive and transmit written messages

Fire alarm and smoke detector systems that activate strobe lights and/or vibrators

Warning lights that flash on when machines are running, or that signal when a machine has completed its task

Anti-static carpet treatments (a build-up of static electricity can interfere with hearing aid operation)

Sign language courses offered by the employer to first-line management and fellow employees, or interpreters for the deaf

Placing wooden blocks under the desk to raise it to a usable height

Allowing use of the lower drawers in a filing cabinet by the disabled only

Permitting job sharing

Providing readers

Allowing time off for a worker to receive required treatment connected with his or her disability

Lowering paper cup holders to an appropriate height near water fountains

Providing handicapped parking spaces and enforcing that non-disabled park elsewhere

Equipping a company car with hand controls

Putting in a telephone with pushbuttons, or installing a speaker phone

Ordering a typewriter that can be used with one hand

Extending lunch time so the person who needs extra time in the restroom because of disability has as much time to eat lunch as everyone else does

Restructuring jobs and modifying work schedules to fit the disability of the employee

Providing a cassette recorder to employees with disabilities that could benefit from them

Using a braille filing system

Placing tactile markings on various equipment (Milner, 1979; Zimmer, 1981)

An employer can reduce oversights in terms of accessibility by reviewing the entire access system of the facility. One way to review the system is to "walk through" the sequence of activities, keeping the various disabilities in mind in order to locate discrepancies. The following accessibility checklist can assist the employer in a review of the access system.



## ACCESSIBILITY CHECKLIST

### SITE CONSIDERATIONS

- Parking space:* Is the parking space at least 12' wide and located near an access ramp?
- Curb cuts:* Is the curb cut at an acceptable 1:12 slope and not where traffic flows?
- Sidewalks:* Is the sidewalk at least 48" wide with a gradient not greater than 5%?

### DOORS

- Width:* Is the width of the door opening at least 32"?
- Opening pressure:* Is the door pressure less than 8 pounds?
- Threshold:* Is the threshold flush with the doorway?

### FLOORS AND HALLS

- Width:* Is the hallway at least 48" wide to allow a wheelchair to make a right-angle turn?
- Surface:* Is the floor covered with a non-slip surface?

### WATER FOUNTAINS

- Height:* If wall mounted, is basin less than 36" from floor?  
If floor mounted, is spout no higher than 30"?
- Controls:* Is the control in front and is it hand operated?

### ELEVATORS

- Width:* Is the inside of the elevator at least 5' square?
- Controls:* Are call buttons easy to reach and centered at 42" above floor? Is emergency telephone no higher than 48" above floor level?
- Opening:* Is opening of elevator at least 32" wide?

### REST ROOMS

- Stall:* Is one toilet stall at least 5' deep and 3' wide?  
Is door at least 32" wide and does it swing out?
- Grab bars:* Are grab bars at least 33" high and parallel to floor?  
Is there enough space to provide a lateral transfer?

(Cary, 1978; Weisgerber, 1981)

## Job Analysis

A job analysis should be performed in order to explore ways to redesign a job to better suit a disabled employee (Hollman, 1979). A good job analysis describes the tasks the job involves, the setting in which the job is performed, and the equipment the job requires. The job analysis should detail the skills, the physical requirements, and the behavior required for that particular job.

It should also include information such as:

1. The physical demands, whether walking, standing, stooping, or carrying.
2. The mental skills needed, such as reading, writing, reasoning, and mathematical calculation.
3. The stress the job causes through repetition, pressure, or physical effort.
4. The sequence of steps, with physical and time requirements, that the job entails.
5. The tools and machines to be used.
6. The amount of noise, ventilation, and dust, and the density of air in the environment (Pati, 1982, p. 14).

## Policy and Practice Barriers

Policy and practice barriers include rules and regulations that may prevent disabled people from experiencing the same activities as non-disabled people do (Hicks, undated). Disabled job seekers are sometimes denied employment opportunity because of long-standing rules and regulations that have unintended results.

Section 503 of the Rehabilitation Act of 1973 is an attempt by the federal government to provide equal employment opportunity for the disabled by encour-

aging employers to hire more qualified handicapped people. Every employer doing business with the federal government under a contract for more than \$2,500 must take affirmative action to hire handicapped people (President's Committee on Employment of the Handicapped, 1980).

Government regulations have defined the following terms:

Handicapped person: One who has a physical or mental impairment that substantially limits one or more of his or her life activities, or has a record of such an impairment, or is regarded as having such an impairment.

Qualified handicapped person: In relation to employment, a qualified handicapped person is one who can, with reasonable accommodation, perform the essential functions of a given job.

Reasonable accommodation: Determination of whether the accommodation is reasonable is based on the size of the business and the cost of the accommodation. Examples of accommodations are modifying equipment or schedules, providing interpreters.

Affirmative action: This action consists of taking positive steps to consider the disabled for employment, hiring them, the types of job assignments they may have chances at, promotions, training, transfers, terminations, etc. Half of all the businesses in the United States (approximately 3,000,000) are subject to affirmative action guidelines.

Substantially limit: The degree to which the disability affects employability.

Major life activities: Those life activities that affect employment, such as communication, ambulation, self-care, transportation (Affirmative Action to Employ Handicapped People, 1980; Affirmative Action for Disabled People, 1980).

# Complying with the Law<sup>1</sup>

## Interviewing

As a federal contractor covered by Section 503, you are not permitted to ask an applicant if he or she is handicapped. Nor are you permitted to consider the applicant's handicap as a criterion for not hiring them, unless the disability clearly would impede the worker's qualifications for the job, even with reasonable job accommodations. In other words, a handicap must be job-related to warrant disqualification. (Example: a blind bus driver.)

Similarly, you may not ask questions about an individual's disability, unless it is job-related. You may, however, invite an applicant to inform you of a disability that he or she may have in order that you might use the information to (1) consider them a part of your affirmative action program and (2) work on a reasonable job accommodation that may be necessary. To accomplish this, the following words have been suggested by the Department of Labor, to be included on application forms: "As an affirmative action employer subject to Section 503 of the Rehabilitation Act of 1973, we invite you to inform us of any mental or physical handicap you may have. This information is not required by law, and will be handled in a non-discriminating and confidential manner."

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<sup>1</sup>Reprinted from Interviewing and Recruiting Qualified Handicapped Employees, by permission of Mainstream, Inc., 1200 15th Street, N.W., Washington, D.C.

## Guidelines

### DO'S

1. Do obtain necessary, relevant background data regarding the qualifications of the applicant.
2. Do ask direct questions about the applicant's ability to perform the job in question.
3. Do give more information about the nature of the work than you might in a routine interview situation (such as the mental, physical, and safety requirements).
4. Do use job site visits whenever possible during the interview.
5. If the applicant volunteers to be part of your affirmative action program, do inquire about the need for job accommodations. Ask the applicant for suggestions for appropriate accommodations and make sure all such questions are job-related.
6. Do give clear, non-patronizing reasons when a "no fit" situation occurs. But be certain that all avenues of reasonable accommodation and job analysis have been explored.
7. Do remember, when an applicant declares more than one disability, to only ask questions about the job-related disability.

### DON'TS

1. Don't ask questions about a person's handicapping condition that are not clearly job-related.
2. Don't be overly solicitous, condescending, or patronizing while interviewing a handicapped applicant.
3. Don't make any assumptions about a person's ability to perform a job based on your knowledge or ideas about a disabling condition.
4. Don't make any assumptions about a person's ability to perform a job based on your experience with, or knowledge of, other people with identical impairments.
5. Don't make assumptions about a person's social adaptability in the job situation (particularly deaf persons, mentally retarded persons, or applicants recovering from mental illness).

## Recruiting

The backbone of a successful affirmative action program is recruitment. And the unique part of Section 503 is that it requires federal contractors to develop positive and vigorous outreach programs to find qualified handicapped workers. Contractors have found that, traditionally, disabled people do not come knocking on personnel doors -- and the reason may be that the door is inaccessible -- both in architectural and attitudinal terms. But contractors are also finding that efforts used to attract other minority workers will also pay off in finding disabled workers. For example, it is good policy to add "Handicapped" to all affirmative action announcements. Outreach programs are rarely characterized by instant results, but once the word is out that an employer is sincere about affirmative action programs, the recruiting program can snowball to success.

## The Law

Section 503 of the Rehabilitation Act requires that contractors undertake outreach and positive recruitment activities, as to employment and advancement of qualified handicapped individuals. The scope of the outreach efforts to be undertaken depends on the contractor's size, resources, and the extent to which his or her existing employment practices are adequate. The Section recognizes that traditional recruitment sources and practices will not necessarily be sufficient to attract handicapped applicants for employment. Many plants rely on applicant initiative to approach personnel offices -- initiative handicapped individuals are unlikely to assume, since they cannot be sure of the accessibility of personnel facilities, or of the attitudes of personnel managers. Employment agencies, whether public or private, vary from state to state in their concern for the employment of the handicapped. Therefore, it was necessary to

- determine individually the capability of each source to respond to job requests, assuming that individual handicapped applicants will not "take the first step."

## Guidelines

### DO'S

1. Do establish an ongoing relationship with your State Vocational Rehabilitation Agencies, Employment Security Offices, and Disabled Veterans Offices.
2. Do research all agencies in your area that deal in job training and placement for handicapped individuals (example: blind services programs, training programs for the retarded, individual placement programs for the disabled).
3. Do contact coordinators of handicapped affairs when planning campus recruiting to make them aware of your visit.
4. Do remember to include handicapped along with women and minorities in your employment announcements (example: F/M/H).
5. Do make your job listings available in alternate forms (example: tapes, braille for the blind, and printed matter for the deaf).
6. Do include current handicapped employees in your corporate publications so your work force is aware of your receptivity to handicapped employees.

### DON'TS

1. Don't schedule recruiting and interviewing sessions in inaccessible places.
2. Don't forget to advertise job openings in publications read by handicapped persons (example: periodicals by consumer groups and provider organizations).
3. Don't forget to make auxiliary aids available when interviewing if needed (example: interpreters for the deaf).
4. Don't forget to make local and national resources aware of anticipated needs (example: corporation will be opening a new accounting division in a year).
5. Don't stereotype when recruiting.

## Communication Barriers

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Emotions, feelings, and attitudes are involved whenever people communicate. "Communication is the sharing of a message or an idea which results in a high amount of understanding between the sender and the receiver of the message" (Eggland & Williams, 1977, p. 150).

Communication barriers can exist between the disabled and non-disabled because each party may be perceived by the other as "different." This "differentness" could result in being unsure of how to share a message, or being unsure of the amount of understanding each one has about the other.

In order to understand more about different disabilities, a brief list of disabilities, their effects, and interaction tips are given.



# Learning Disabilities

## *Definition*

People who are learning disabled have difficulty collecting, sorting, storing, and expressing information through their senses. They are capable of learning and performing, as they have average or above average intelligence, but learning has been affected by the problems they have with processing information. This inaccurate sensory information may lead to problems in speaking, listening, reading, and writing. Speech may be disjointed and may be repetitive without concluding a thought. The pronunciation of words may be garbled, "comforble" for "comfortable." A person may have difficulty completing an application form because of inability to understand the questions asked or to adequately express the information sought in a written form (Tindall, 1980).

By the time a person reaches adulthood, he/she usually has many workable strategies for acquiring and processing information. For example, he may use a dictaphone if he has trouble with written language, or a calendar if she has trouble remembering appointments.

It is important to remember that not all people are affected in the same way. Most, if not all, will use a combination of learning strategies to compensate for their disabilities.

## INTERACTION

### *Learning Disabilities*

1. If the person gives a seemingly unrelated response to something you say, ask "What did you hear me say?" If the answer is incorrect, fill in the gaps.
2. Be sure you have the person's attention when giving important information. Often, a touch on the arm, calling his/her name, or saying "What I am going to say is important," will cause the person to focus attention on you.
3. Give directions in sequential steps.
4. Ask the person what his/her strengths are and present material and directions to that strength. For example, if the person best receives information visually, use pictures, flow charts, and printed materials, and avoid verbal directions. If the person has an auditory weakness, be sure he/she understands what you say. You may want the person to repeat important instructions.
5. Express yourself directly. Avoid hints or nonverbal signals.
6. Be willing to make accommodations, such as substituting phone calls for letters, arranging a quiet place to work, or providing a floor map of the physical layout of the worksite.
7. Allow the person to repeat instructions. Often the employee needs to hear himself/herself say the instructions in order for the information to be processed. This also allows the employer to verify the correctness of the instructions.
8. Demonstrate the way to do a job.
9. Give criticism in a positive manner so that the person can learn from his/her mistakes. But also give praise, as it is essential to the individual's success on the job.
10. Do not clutter training manuals with extraneous material. Present visual materials as clear representations.
11. For persons with a visual sequencing difficulty (difficulty seeing things in the correct order; for example, seeing numbers or letters reversed), verbally reinforce what is written down. Use a tape recorder to give information.
12. For persons with auditory memory difficulty (difficulty remembering names, specific facts and numbers, appointments), write instructions in checklist form. Reinforce auditory cues with visual cues.

(Brown, 1980; Tindall, 1980; Brigham, Note 1)

# Hearing Impairments

## *Definition*

"According to a 1971 census, there are 13.4 million persons in the United States with hearing impairments, ranging from mild to profound hearing losses. Of these, 1.8 million are deaf; i.e., even with a hearing aid, they cannot hear and understand speech. The rest are hard of hearing. Their hearing, although defective, is functional" (Office of Personnel Management, 1979, p. 39).

How a person is affected by a hearing loss depends on the age at which the loss occurred and the degree or range of the hearing loss. If a person is born deaf, the person has never heard the spoken word, but may be able to respond to vibrations or loud noises. The person's speech may sound monotonous and mechanical, and you may need to listen intently to the person at first. Gradually, you will learn the person's speaking style and it will be easier to understand. If the hearing loss occurred after the age of five (after language and speech have already been acquired), the person's speech is more developed and will be easier to understand.

Deaf people as a group are no less intelligent than any other group of people. But because so much learning takes place through hearing, the hearing impaired face more difficulties in learning.

Some common communication strategies used by the deaf are lipreading, sign language, finger-spelling and writing. Not all hearing impaired persons can read lips and even a practiced lipreader can understand only 30 to 40 percent by watching a speaker's mouth (Office of Personnel Management, 1979). Hard of hearing individuals often communicate without the use of manual language and lipreading, and they often have the ability to hear and understand the spoken word, although the words are not always clear and may be distorted.

If a hearing aid is worn, do not assume that the presence of a hearing aid restores normal hearing. It does not. A hearing aid amplifies sound. If background noise is present during speech, the hearing aid will amplify both the background noise and the spoken word.

## INTERACTION

### *Hearing Impairments*

1. Get the person's attention before speaking. For example, a tap on the shoulder, or a wave of the hand, will suffice in gaining the persons' attention.
2. Face the person directly.
3. Do not sit directly in front of the light, as that could make your face difficult to see. Lipreading is easier if the person reading does not have to look into the light.
4. Do not over-exaggerate lip movements. Do not mumble or chew gum. When communicating, avoid turning your head or putting your hand in front of your mouth.
5. Keep beards and mustaches trimmed. The majority of words are lipread using the upper lip.
6. Use facial expression and gestures when speaking, as they are good clues to meaning.
7. Often you may find the person looking at you intently and at a close range. Relax, he/she is only trying to read visual cues. It is important that you don't look away -- the person may think the conversation is over.
8. If you know finger-spelling and some signs, use them. The person will appreciate your efforts to communicate.
9. If the hearing impaired person asks you to repeat or does not understand, rephrase a thought rather than repeating the same words, as it may be the combination of words that is difficult to lipread. Use complete sentences.
10. If you don't understand something, admit it. Ask the person to rephrase. Use paper and pencil if needed. Remember that the person may use unusual sentence structure.
11. If the person is using an interpreter, speak directly to the person and do not use the third person (e.g., "Tell him that...").
12. The highest comprehension level is one-to-one. If you have something important to say, don't say it in the hall or in the cafeteria. You don't want your voice to compete with the background noise.
13. When introducing your new deaf worker to other employees, do it individually. This allows the deaf person to catch names and other information more easily.

### *Hearing Impairments*

14. Be positive, brief, and matter-of-fact. Other workers will take their attitude from you.
15. During training sessions, provide an advance agenda. This will define the context and will facilitate discussion. It will also provide an opportunity for the deaf employee to get technical terminology defined.

(Tindall, 1980; Murphy, Note 2)

# Epilepsy

## *Definition*

Two million adults in the United States have epilepsy, i.e., two out of every 100 people (Office of Personnel Management, 1979). Epilepsy is not a disease, but a "symptom of an intermittent imbalance of electrical activity of the brain characterized by recurring seizures" (Foster, 1978, p. 58).

The person is not incapacitated by the disability except during the epileptic episodes, which can last for a few seconds or up to several minutes (Karan, 1972). A seizure is a function of overactivity in a group of brain cells that causes a temporary change in the person's conscious state and a loss of muscular control. A seizure can vary from a complete blackout to a momentary lapse. It can last from a few seconds to a few minutes. Sometimes, a seizure can come without warning, although most people do get a warning, called an aura, that a seizure is on the way (Epilepsy Foundation of America, 1980). The aura can manifest itself in a number of ways, such as a sound, a smell, or a color.

Grand mal seizures are characterized by complete blackouts, usually of short duration. The muscles become rigid, and movements are jerky. Petit mal seizures may be characterized by a temporary loss of consciousness or an impairment of consciousness when, for example, the person may stare into space. Psychomotor seizures are characterized by altered states of mind and motor movements of the body. The person may look as if he or she is conscious and functioning, but in reality the person is not in a conscious state and, therefore, not functioning. The person may talk gibberish, may nod his head quickly, or move her body rhythmically. Medication can control, either partially or completely, seizures in approximately 80% of persons with epilepsy (Office of Personnel Management, 1979).

## INTERACTION

### *What to Do During a Seizure*

#### *Epilepsy*

1. Do not try to restrain the person's movements or give anything to drink.
2. Do not place anything in the person's mouth. The person cannot swallow his/her tongue.
3. Remove hard, sharp, or hot objects out of the person's way.
4. When convulsive movements have ceased, turn the body and head to one side. This will assure unobstructed breathing. Do not be alarmed if the person having a seizure appears not to be breathing momentarily.
5. Do not try to revive the person. Let the seizure run its course.
6. Record the details of the seizure, such as time of onset, length of seizure, and behavior.
7. If a person seems to be having a series of seizures, whereby the person appears to be in a fixed seizure state, or if one seizure lasts longer than 10 minutes, call for medical attention.
8. After a seizure, it is normal to be sleepy, and the person may wish to lie down for a short period of time.
9. If the seizure occurs in a public place or busy work area, keep the curious bystanders away. It is very uncomfortable for the person to come out of the seizure and have to face glaring stares and questions.
10. Remember, the person is a normal, functioning individual except during a seizure.
11. If the person is to work with heavy or potentially dangerous equipment, find out the status of epilepsy; i.e., controlled or not controlled seizures.

(Epilepsy Foundation of America, 1980; Prichard, Note 3)



# Mobility Impairments

## *Definition*

Approximately 500,000 people use wheelchairs. This mobility aid is used for a variety of reasons: paralysis, muscle weakness, nerve damage, stiff joints, low energy levels, severe breathing problems. Accidents such as falls, car crashes, gunshot wounds, sports injuries, and obstetrical mistakes are major causes of paralysis (a loss of voluntary action). Other causes of paralysis are strokes, tumors, polio, muscular dystrophy, and multiple sclerosis (Office of Personnel Management, 1979).

Not all wheelchair users are paralyzed. Many can walk with the use of other mobility aids, such as canes, walkers, and crutches. Speed and ease of mobility are increased with the use of a wheelchair and, therefore, many prefer to use one.

## INTERACTION

### *Mobility Impairments*

1. Sit down, if possible, so you are at eye level. Allow the wheelchair user to avoid looking up at an angle.
2. It is okay to use words like "walk," "run," "have a seat," or "stand there."
3. Talk directly to the person. Do not use a third party as an intermediary.
4. Do not assume the person is "sick." Treat the person as a healthy person.
5. Many people can "transfer" (slide out of their wheelchair into a regular chair, car seat, etc.) by themselves, but many who use motorized chairs cannot. Ask if the person needs help and ask how to help.
6. If it looks as if someone is needing assistance, offer to help. If the person needs help, your offer will be accepted. If the assistance needed is technical, let the person tell you what needs to be done. Do not assume you can just grab a chair and hoist it up steps -- strategy is involved and the wheelchair user is the source of information.
7. Don't grab, fiddle with, lean on, or put your hands and feet on the person's wheelchair. This is part of the person's body space and such action is inappropriate.
8. Most disabled people engage in the same activities you do: dating, marrying, having children, shopping, traveling, bowling, playing tennis, etc.
9. Most disabled persons will answer legitimate questions, such as "How do you reach equipment?" or "Will you need help in unlocking the door?" A non-legitimate question is curiosity-based and usually borders on the personal, such as "How long have you been in that wheelchair?" or "Are you able to have children?" The disabled employee, with good reason, would be reluctant and resentful to be asked such questions. A general guideline is to assume that personal and irrelevant questions which would annoy non-disabled employees would equally annoy the disabled employee.
10. If a person has a muscle spasm in the leg, the leg may start jerking and often just moving around may stop the spasm. There is nothing the bystander can do about curtailing the spasm. If you see the person's foot off the footrest of the wheelchair, ask if he/she is aware that it is off and if he/she needs assistance in repositioning the foot back on the footrest.

(Foth, Note 4; Gefter, Note 5; Molina, Note 6; Montgomery, Note 7)

## *Mobility Impairments*

### Opening a Door

1. Ask if the person needs assistance to open the door. If not, do not insist. If yes, go through the door first, then stand behind the opened door while the disabled person goes through.
2. Do not hold the door open while you stand in the door opening. This forces the person to go under you ("London Bridge" style) and may result in your toes being crushed.

### Boarding and Unboarding an Elevator

1. Let the wheelchair user on first and allow him/her turn-around room. No one likes facing the wall.
2. The disabled individual will either tell you the floor to press or may do it herself/himself. Do not assume the disabled person cannot/will not press the elevator button for you as well.
3. When unloading, remain behind and press the "open" button. Allow the disabled individual to leave first; otherwise, the person may not have enough time to leave the elevator.
4. Do not hold your arms across the elevator doors in an attempt to keep them open. This method does not allow the person enough room to maneuver and may result in your toes being crushed, or cause the person on crutches to fall.

# Mental Retardation

## *Definition*

"Mental retardation involves inability to use one's mind for thinking, figuring, or remembering as well as someone who is 'normal'" (Office of Personnel Management, 1979, p. 50). There are approximately four to six million people who are retarded in the United States. Individuals differ in their patterns of strengths and weaknesses, but their overall capabilities fall short of what is expected of people of their age and experience. Individuals who are retarded are not mentally ill, although one-third of retarded persons do suffer multiple handicaps, epilepsy, cerebral palsy, and mental illness.

People who are retarded are characterized by difficulty in learning and by the amount of time and resources that are needed to learn. After learning a skill, the person can perform it at acceptable levels of quality and speed (Tindall, 1980).

## INTERACTION

### *Mental Retardation*

1. Talk to the person as you would to anyone else, but be more specific.
2. Demonstrate what is to be done and avoid abstractions.
3. Ask questions to be sure you are being understood. Ask the person to explain what needs to be done. Ask the person to do the task while you observe.
4. If possible, identify one person who will be available to answer questions or to whom the employee can go for help.
5. Be sure the person knows where he/she should go at the end of the day for transportation.
6. Be sure the employee understands signs such as exit, danger, keep out.
7. Promotion should be considered carefully. If the person is the best worker for the job, promote him/her.
8. Praise the employee for the work accomplished.
9. Whenever possible, use visual aids to reinforce verbal instructions.
10. Point out the job site where the individual will work, the time clock and how it works, the restroom, supervisor's office, and lunch room.
11. Explain about pay periods and wages, emergency procedures, receiving and making phone calls, break times, and quitting times.

# Visual Impairments

## *Definition*

Over 75% of all "blind" persons have some usable vision. Therefore, the term "blindness" should be reserved for complete loss of sight. The term "visually impaired" is a better description of people whose sight is affected. "Legally" blind is defined as a person who, with vision corrected as best as possible, can see less at 20 feet than can a person with normal vision at 200 feet, or one whose field of vision is limited to a narrow angle, usually less than 20 degrees (Office of Personnel Management, 1979).

Visual acuity figures, however, do not tell you how functional a person is. For example, one person may be able to read regular printed material by bringing the material closer to the eyes, another person may use a magnifier, and yet another may use large print or braille materials.

## INTERACTION

### *Visual Impairments*

1. If a blind person seems to need assistance, identify yourself and offer your services. If you tap the person on the shoulder, you can be sure the person knows you are talking to him/her.
2. If you are to act as a sighted guide, let the person take your arm. Do not stiffen your arm, but carry it normally. The person will follow the motion of your body. Walk about one-half step ahead and be sure to identify steps and curbs as you approach them.
3. If you come to a narrow area, hold your arm closer to your body. The person will understand that a narrow place is ahead.
4. Give manuals and training packets to the person as soon as possible after hiring so the materials can be brailled or taped.
5. When giving directions to the blind, use descriptive words such as straight, forward, left, three doors. Be very specific in direction changes. Do not say "down there," but "left ... on top of the desk." When outside, use compass directions.
6. Don't rearrange or touch the person's desk. Consistency in the physical arrangement of the work area is important. If you do make changes, inform your employees with visual impairments.
7. Do not play "Can you guess who I am?" Identify yourself when speaking to the person. For example, say "Hello, this is Cathy and I'm your office mate." This gives the blind person a chance to link your voice, name, and relationship.
8. If you leave the area, particularly where the noise level is high (e.g., the cafeteria), tell the person you are leaving the room.
9. It is okay to use "look," "watch," "I'm glad to see you."
10. If your employee uses a guide dog, the person is responsible for cleaning, watering, feeding, and relieving. DO NOT TOUCH THE DOG without asking permission.
11. Do not yell. The blind are not deaf.
12. Treat the employee as an adult with full mental capacity.
13. If grooming isn't okay, be discreet but mention it.
14. Provide time for mobility and orientation training. The training will enable the blind person to move within the work environment independently.

(Geffer, Note 5; Ward, Note 9)

## Preparing the Co-workers

The co-workers' treatment of the disabled worker will certainly have an effect on the disabled worker's initial performance. If the disabled worker feels that the co-workers are shunning him or her because of the disability, he or she may retreat and, perhaps eventually fail at the job for reasons that have nothing to do with job competence and performance (Office of Personnel Management, 1979). The co-workers may perceive the disabled worker as receiving "preferential treatment" if they are unaware of the presence of a handicap, and may shun the disabled worker. Because of these and other situations, the introduction of the disabled worker calls for tact and sensitivity on the part of the supervisor.

The following guidelines suggested by Weisgerber (1980) may be helpful:

1. Seek advice from the disabled employee. The employee has to deal with this situation almost daily. Perhaps he or she can suggest a tactful route for you to follow -- humor, matter-of-fact. The employee may wish to tell co-workers about the disability himself/herself.
2. If there is a hidden handicap, such as epilepsy or a learning disability, there may be pressure not to reveal anything. Be aware if the condition causes any acute attacks or if the condition can be aggravated by innocent "horse-play." If so, you need to inform co-workers.
3. The mere existence of a disability may not mean a person needs to be identified. A disabled employee with an artificial leg or a legally blind person, for example, can function effectively without special attention.
4. The individual with a visible handicap may want you to share what his or her special needs are in relationship to work (e.g., a food tray needs to be carried, assistance is needed when tools are dropped) but does not want you to share the reasons for confinement to a wheelchair or how he/she became blind, etc. Respect the employee's privacy.
5. Do not embarrass the individual.



6. You may want to assign a "buddy" for the first week until the person becomes oriented to the job. The buddy could be responsible for introducing the new employee to co-workers and for answering job-related questions.
7. Communicate your backing and support of the individual with words and action.

# Mini-Activities

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Following are some mini-activities to encourage participants to express their feelings and ideas about disability. Through the activities, they can talk about misconceptions and be assured they are not alone in their ideas.

The use of "role playing a disabled person in a natural social environment has both immediate and long-term effects on interpersonal attitudes toward disabled students. Those who played the role of a disabled person by traveling around the campus in a wheelchair responded significantly more positively than control subjects" (Clore & Jeffery, 1972, p. 110).

As a facilitator, you should caution the participants to expect that the simulations may result in the release of pent-up emotions. A facilitator also needs to be prepared for such a release and make provisions to guide closure to the emotions.

### MINI-ACTIVITY

**OBJECTIVES:** To stimulate discussion and to bring unspoken thoughts into the open.

**PREPARATION:** Prepare and distribute hand-outs of open-ended statements to participants. A supply of pens should be available.

**EXERCISE:** Attitude survey adapted from People Aiding Disabled Students, Office of Disabled Student Services, Florida State University.

1. When I see a handicapped person in public, I feel\_\_\_\_\_  
\_\_\_\_\_.
2. Handicapped persons make me nervous when\_\_\_\_\_  
\_\_\_\_\_.
3. Most handicapped people are\_\_\_\_\_.
4. If I had to choose a disability for myself, I would be\_\_\_\_\_  
\_\_\_\_\_.
5. If I worked with a handicapped person, I would\_\_\_\_\_  
\_\_\_\_\_.
6. I wish handicapped people would be\_\_\_\_\_.

### MINI-ACTIVITY

- OBJECTIVE:** To experience the frustration of not being able to perform fine motor tasks.
- PREPARATION:** Distribute tongue depressors and tape among the participants. Individuals are to tape the tongue depressors to the backs of their fingers.
- EXERCISE:** Participants should be handed an abbreviated employment application and attempt to complete it legibly. The participants should be aware of the intensity of their feelings at being unable to manipulate the pen effectively and perform the task efficiently.

### MINI-ACTIVITY

- OBJECTIVES:** To increase awareness of non-verbal individuals by experiencing the frustration of ineffective communication.
- PREPARATION:** Divide the group into pairs. One partner will be the employer, the other a non-verbal employee. Both participants should be conscious of coaching by the employer and the frustration of waiting for a response.
- EXERCISE:** This is a job interview. The verbal employer must ask open-ended questions of the non-verbal employee. For example: "Tell me why I should hire you for this position." What are your strengths and weaknesses?" The employees may speak with their mouths closed, or by writing out responses using the opposite hand they normally write with.

### MINI-ACTIVITY

- OBJECTIVES:** To be aware of the frustration of being in a dependent role; to become aware of other people's reactions to being fed in public; to understand the level of cooperation needed; to realize how difficult it is to seek help.
- PREPARATION:** Divide the group into pairs. One partner will feed the other partner (non-feeder) who cannot use his/her hands. The cafeteria in the work setting (at slowdown time) would be ideal for this activity. Partners should be aware of people's reactions to them.
- EXERCISE:** Partners should agree as to who will be the assistant. The non-feeder cannot use his/her hands once the pair reaches the cafeteria. Therefore, the two must plan how the assistant will select the food, carry the tray, pay for the food, feed the person, and clean up. The assistant is also responsible for eating his or her own meal.

### MINI-ACTIVITY

- OBJECTIVES:** To enable individuals to evaluate the impact of a disabling condition upon their career/work.
- PREPARATION:** Have paper and pencil for each group member. The facilitator may want to briefly describe several disabilities and their impact on career choice. The members should be reminded that disability can occur at any time in their lives.
- EXERCISE:** Participants should choose three specific disabilities that they would least want to experience, and write down why they would not want it. They then choose the least wanted disability and list five specific ways in which it would affect their current occupation. The members then can go into groups of 6 to 8 people to discuss their choices. The leader then encourages members to suggest ways the employer/employee can accommodate the person in his or her current occupation. If the current occupation is not feasible, then the "disabled" member should choose another career and identify the ways and means he/she would attain that career choice.

### MINI-ACTIVITY

**OBJECTIVES:** To experience the frustration and success of learning a new task; to realize the importance of giving good verbal instructions to a visually impaired worker.

**PREPARATION:** Divide the group into pairs. Distribute blindfolds to each pair. One partner will act as the sighted guide and the other as a visually impaired person. Roles will be switched after a pre-determined time.

**EXERCISE:** The sighted guide gives a set of verbal instructions that will enable the visually impaired person to complete a task; e.g., threading a circuit board. The partners will gradually understand the importance of being specific in directions (e.g., whose left, how much is a "little bit," what a thingamajig or doodad is).



### MINI-ACTIVITY

**OBJECTIVES:** To experience the frustration of reading with a reversal, substitution, or omission problem such as many learning disabled experience.

**PREPARATION:** Put on the blackboard or pass out paragraphs with the following example:

"Along all the main tho roughfare of Mest Colfax,  
you'll finb small, comfortadle family motels with  
qrices the in \$02 to \$3s range. For more dollars  
a few, you can stay in poqular chains like the  
Holibay Inn, Warriott's, and Pawaba Inn a long  
same the street."

**EXERCISE:** A volunteer can read the passage out loud. Listen to how long it takes the person to read the paragraph. What is the comprehension level of the paragraph? What happened in the paragraph? Can you imagine how the learning disabled person feels about reading? What accommodations could you suggest for the person with this type of disability?

### MINI-ACTIVITY

- OBJECTIVES:** To increase awareness of visual impairments by experiencing a derendency role.
- PREPARATION:** Divide the group into pairs. One partner wears a blindfold over the eyes. The sighted guide leads the blind partner around the work environment (cafeteria, grounds, etc.). It is important for safety reasons that the guide maintain physical contact with the other partner.
- EXERCISE:** The guide should be as non-verbal as possible. The blind partner should verbalize his/her awareness of the surroundings. For example: "Where are you taking me? I smell bacon, so we must be in the cafeteria. I hear a familiar sound, so we are near the elevator." The blind person should do a familiar task, such as dialing the telephone. This will increase his/her confidence in the new role. After a predetermined time limit, the roles are reversed.

### MINI-ACTIVITY

**OBJECTIVES:** To explore attitudes toward the disabled.

**PREPARATION:** The participants should be separated into two groups. Each group should have a flip-chart or blackboard and a volunteer to record responses. The two groups should be out of hearing range of each other.

**EXERCISE:** Group A is asked to list the qualities they associate with the word "disabled." Group B is asked to list the qualities they associate with the word "non-disabled." The groups then share the lists and should reflect on the differences between the lists. Group discussion should center on society's values of physical health and beauty.

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# Glossary

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*A.B.:* An able-bodied person, also known as walkees.

*Accessible:* Facilities which may be used by individuals despite handicapping conditions.

*American Sign Language (ASL):* A system used by the deaf that involves well-defined hand and arm movements that represent concepts.

*Arthritis:* Inflammation of the joints, occurring as several types of arthritis. Usually fatigue, weakness, stiffness, and pain accompany the disease. Persons often use canes, crutches, or wheelchairs.

*Ataxia:* Results in deterioration of the nervous system, causing failure of muscle coordination and irregularity of muscle action. It affects as a rule balance and coordination. Intelligence is not affected.

*Cerebral palsy:* Caused by damage to the brain usually before, during, or shortly after birth. The brain affects control over voluntary muscles in the arms, legs, tongue and eyes. Persons with cerebral palsy may speak in an unusual way, swallow with difficulty, distort the face, walk with difficulty, or use a mobility aid. They usually have normal or superior intelligence.

*Directional problem:* Difficulty distinguishing left from right; learning north, south, east, west.

*Disability:* A permanent limitation or impairment that may or may not interfere with life adjustment. It can be medically described; e.g., wearing glasses.

*Finger-spelling:* A communication system used by the deaf that involves using the hands and fingers to indicate each letter of the alphabet. Words can be spelled out letter-by-letter.

*Grabber:* A long wooden scissors-shaped device with a magnet on the end for picking up objects.

*Hand brace:* A metal device (splint) that aids in hand functions such as writing, feeding, and driving.

*Handicap:* A cumulative result of the obstacles that disability interposes between the individual and his or her maximum functioning level; for example, interpersonal relationships.

*Hidden handicap:* A disability that is not readily apparent.

- Mainstreaming:* Refers to bringing the handicapped person into the major work and traffic flow of the facilities (Zimmer, 1981, p. 194).
- Mobility training:* A mental and sensory orientation to the environment and to physical movement.
- Multiple sclerosis:* A disease of the nervous system. Muscle control, speech, balance, and other bodily functions may be affected. Many use wheelchairs. Symptoms are not consistently present, which means the individual may be able to live an independent lifestyle.
- Muscle spasm:* When a person (usually with a spinal cord injury) receives a stimulus below the point of injury (such as heat, cold, pressure, or stress), the impulse travels to the point of injury, where it is blocked. It then returns along the nerve, often creating a repeating muscle contraction, called a spasm.
- Muscular dystrophy:* A group of diseases characterized by progressive wasting and weakening of the muscles.
- Optacon:* An electronic device that is moved across a line of type, converting light patterns from the type into a tactile pattern.
- Oral communication:* A system for the deaf that uses lipreading to receive spoken language and uses oral speech to speak with others.
- Paraplegia:* Paralysis of two limbs.
- Quadraplegia:* Paralysis of four limbs.
- Ramp:* A ramp should be at least four feet wide and have a gradient no greater than 1:12.
- Readily accessible:* Access that is equivalent in terms of ease and convenience for non-disabled and disabled employees (Zimmer, 1981, p. 191).
- Reasonable accommodation:* Adaptation of the work environment, or requirements in order to accommodate the physical or mental limitations of a disabled employee.
- Speech compressors:* Devices that allow the individual to select the listening speed of audiotaped materials.
- Tactile perceptual problem:* Difficulty receiving and processing information through the sense of touch.
- Talking calculators:* Models are available that can be hand-held or desk-type. They come with a variety of basic functions from independent memory to accumulating memory. Some calculators have braille output.
- Targeted Jobs Tax Credit (TJTC):* The program, enacted in 1978, allows tax credits to employers who provide jobs for persons from targeted groups.

*Telecommunication devices for the deaf:* TDD's are instruments that allow deaf persons to communicate over the telephone. An example is a teletypewriter (TTY) that must be located at both telephone stations. Some devices type the message on a paper roll, while others display the message on a computer-like screen.

*Total communication:* A system for the deaf that uses all forms of communication: lipreading, sign language, finger-spelling gestures, and facial expression.

*Visual perceptual problem:* Difficulty in receiving and processing information through the sense of sight.